

K & K Excavation, Inc.)	Departmental
Androscoggin County)	Findings of Fact and Order
Turner, Maine)	Air Emissions License
A-692-71-E-R)	

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

K & K Excavation, Inc. (K & K) located in Turner, Maine has applied to renew their Air Emission License, permitting the operation of their crushed stone and gravel facility.

B. K & K is authorized to operate the following equipment:

Rock Crushers:

<u>Designation</u>	<u>Common Name</u>	<u>Powered Source</u>	<u>Process rate (tons/hr)</u>	<u>Control Device</u>	<u>Date of Manufacture</u>
#1 Primary Crusher	Jaws	Diesel #1	125	Water Sprays	1990
#1 Secondary Crusher	JCI Cone	Diesel #1	125	Water Sprays	1999
#2 Secondary Crusher	Kodiak Cone	Diesel #2	200	Water Sprays	2003
#3 Secondary Crusher	ELJ	Diesel #2	200	Water Sprays	1990
#4 Secondary Crusher	Pioneer	Diesel #2	125	Water Sprays	2003

Diesel Units:

<u>Source ID</u>	<u>Common Name</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Power Output (kW)</u>
Diesel #1	Big Cat	5.9	600
Diesel #2	Komatsu/Multi	3.9	400
Diesel #3 (back-up)	New Cat	3.9	400
Diesel #4 (back-up)	Small Cat	2.4	250

C. Application Classification

The application for K & K does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of current licensed emission units only.

II. BEST PRACTICAL TREATMENT

- A. In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Rock Crushers

K & K is currently licensed to operate five portable crushers, designated #1 Primary Crusher, #1 Secondary Crusher, #2 Secondary Crusher, #3 Secondary Crusher and #4 Secondary Crusher. The #2 Secondary Crusher and #3 Secondary Crusher have rated capacities of 200 tons per hour each and were each manufactured after August 31, 1983. Therefore #2 Secondary Crusher and #3 Secondary Crusher are subject to EPA New Source Performance Standards (NSPS) Subpart OOO for Nonmetallic Mineral Processing Plants manufactured after August 31, 1983, with capacities greater than 150 tons/hr for portable plants and greater than 25 tons/hr for non-portable plants.

As a requirement of NSPS Subpart OOO, it is necessary that an initial performance test be performed on the applicable crushers. This consists of a certified EPA Method 9 observation. In October 2005 Method 9 observations were undertaken on #2 Secondary Crusher and #3 Secondary Crusher by a representative of R.C. and Sons Paving. The R.C. and Sons Paving representative held a valid Method 9 certification issued by Morrison Environmental Engineering. A copy of the compliance report showing compliance with the facility's air emission license was submitted to the Department by K & K and is on file.

The #1 Primary Crusher, #1 Secondary Rock Crusher and #4 Secondary Crusher have rated capacities of 125 tons per hour. Therefore #1 Primary Crusher, #1 Secondary Rock Crusher and #4 Secondary Crusher are not subject to EPA NSPS Subpart OOO.

The regulated pollutant from the rock crushers is particulate emissions. To meet the requirements of Best Practical Treatment (BPT) for control of particulate matter (PM) emissions from the rock crushers, K & K shall maintain and operate water sprays on the rock crushers as necessary to control visible emissions to no greater than 10% opacity on a 6-minute block average basis.

C. Diesel Units

K & K is currently licensed to operate four diesel units, designated Diesel #1, Diesel #2 Diesel #3 (back-up) and Diesel #4(back-up). The diesel units are rated at 600 kW, 400 kW, 400 kW and 250 kW, respectively.

K & K was previously licensed to fire up to 80,000 gallons per year (gal/yr) combined of 0.05% (on-road diesel) sulfur diesel fuel in the facility's diesel units based on a twelve-month rolling total. K & K has not requested a change in this fuel limit and will continue to be subject to this limit.

Compliance with the above fuel restriction shall be demonstrated through fuel receipts from the supplier showing the quantity of fuel delivered and supplier certification indicating the fuel is on-road diesel. Fuel use records shall be maintained on a monthly basis, in addition to the twelve-month rolling total.

A summary of the BPT analysis for the diesel units is as follows

1. BPT for diesel fuel is a sulfur content of 0.05% by weight.
2. BPT for PM emissions for Diesels #2 and #4 Back-up firing diesel fuel is 0.12 lb/MMBtu. PM₁₀ emissions are based on PM limits.
3. BPT for PM emissions for Diesels #1 and #3 firing diesel fuel is 0.08 lb/MMBtu. PM₁₀ emissions are based on PM limits.
4. NO_x, CO and VOC emission limits are based on AP-42 data dated 10/96.
5. Visible emissions from each stack shall not exceed 30% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

- D. Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour.

E. Facility Emissions and Fuel Use Caps

K & K Excavation, Inc. shall be restricted to the following annual emissions, based on a twelve-month rolling total:

- Total annual facility fuel use for operation of the rock crushers shall not exceed 80,000 gallons of diesel fuel at a sulfur content of 0.05% by weight.

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K & K shall be assessed fees based on the following annual emissions:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	0.7
PM ₁₀	0.7
SO ₂	0.3
NO _x	24.2
CO	5.2
VOC	2.0

III. AMBIENT AIR QUALITY ANALYSIS

According to Chapter 115 of the Maine Air Quality Regulations, the level of air quality analyses required for a minor source shall be determined on a case-by-case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-692-71-E-R, subject to the following conditions:

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions.
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115.

- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both.
- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request.
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353.
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions.
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request.
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license.
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license.
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

- (i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - a. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 - or
 - b. pursuant to any other requirement of this license to perform stack testing.
 - (ii) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - (iii) submit a written report to the Department within thirty (30) days from date of test completion.
- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:
- (i) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - (ii) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - (iii) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.

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- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

SPECIFIC CONDITIONS

(16) Rock Crushers

- A. K & K shall maintain spray nozzles on all the facility's rock crushers and operate the spray nozzles as necessary so as not to exceed visible emissions limits. Visible emissions from the crushers shall be limited to no greater than 10% opacity on a 6-minute block average basis. [MEDEP Chapter 101]
- B. K & K shall maintain a log detailing the maintenance on the water spray nozzles. The maintenance log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]
- C. K & K shall maintain a log detailing and quantifying the hours of operation on a daily basis for all of the facility's rock crushers. The operation log shall be kept on-site at the rock crushing location. [MEDEP Chapter 115, BPT]

(17) New Source Performance Standards

- A. The #2 Secondary Crusher and #3 Secondary Crusher are subject to 40 CFR Part 60 Subparts A and OOO and K & K shall comply with the notification and record keeping requirements of 40 CFR Part 60.676 and Part 60.7, except for Section (a)(2) of 60.7 per Subpart OOO, §60.676(h).

(18) Diesels units

A. Total annual facility fuel use for the operation of the diesel units shall not exceed 80,000 gals/yr. of diesel fuel oil with a maximum sulfur content of 0.05% by weight (on-road diesel), based on a twelve-month rolling total. Compliance shall be based on fuel receipts from the supplier showing the quantity of fuel delivered and supplier certification indicating the fuel is on-road diesel. Fuel use records shall be maintained on a monthly basis, in addition to the twelve-month rolling total.

B. Emissions shall not exceed the following:

Equipment		PM	PM₁₀	SO₂	NO_x	CO	VOC
Diesel #1	lb/MMBtu	0.08	-	-	-	-	-
	lb/hr	0.5	0.5	0.3	18.7	5.0	2.0
Diesel #2	lb/MMBtu	0.12	-	-	-	-	-
	lb/hr	0.5	0.5	0.2	17.2	3.7	1.4
Diesel #3 Back-up	lb/MMBtu	0.08	-	-	-	-	-
	lb/hr	0.3	0.3	0.2	17.2	3.7	1.4
Diesel #4 Back-up	lb/hr	0.3	0.3	0.1	10.8	2.3	0.9

C. Visible emissions.

Visible emissions from the each diesel stack shall not exceed 20% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

(19) Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour.
[MEDEP Chapter 101]

(20) K & K shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order.

(21) Equipment Relocation

A. K & K shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written notice may be sent by mail, facsimile (fax), or e-mail. Notification sent by mail shall be sent to the address below or to a Department Regional Office:

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Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at
www.maine.gov/dep/air/compliance/forms/relocation.

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (22) K & K shall pay the annual air emission license fee within 30 days of March 31 of each year. Pursuant to 38 MRSA 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under 38 MRSA 341-D, Subsection 3.

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the signature above.

Date of initial receipt of application: **December 22, 2006**

Date of application acceptance: **January 9, 2007**

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality